

# UNITED STATES PATENT AND TRADEMARK OFFICE

1.18

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

| APPLICATION NO.          | FILING DATE         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |  |
|--------------------------|---------------------|----------------------|-------------------------|-----------------|--|
| 09/858,470               | 05/17/2001          | Masao Murade         | 109337                  | 1628            |  |
| 25944                    | 7590 09/18/2002     |                      |                         |                 |  |
| OLIFF & BERRIDGE, PLC    |                     |                      | EXAMINER                |                 |  |
| P.O. BOX 199<br>ALEXANDR | 928<br>IA, VA 22320 |                      | PARKER, K               | PARKER, KENNETH |  |
|                          |                     |                      | ART UNIT                | PAPER NUMBER    |  |
|                          |                     |                      | 2871                    |                 |  |
|                          |                     |                      | DATE MAILED: 09/18/2002 |                 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.          | Applicant(s)                                       |  |  |  |  |
|---|--------------------------|--|--|--|--|--|
| Office Action Communication   | 09/858,470               | MURADE, MASAO                                      |  |  |  |  |
| Office Action Summary   | Examiner                 | Art Unit   |  |  |  |  |
|   | Kenneth A Parker         | 2871   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |                          |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                          |  |  |  |  |  |
| Status  |                          |  |  |  |  |  |
| 1) Responsive to communication(s) filed on <u>26 Ju</u>   | <u>une 2002</u> .        |  |  |  |  |  |
|   | s action is non-final.   |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims   |                          |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1,2,4-7 and 9-33</u> is/are pending in the application.   |                          |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                          |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |                          |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1,2,4-7 and 9-33</u> is/are rejected.   |                          |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |                          |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |                          |  |  |  |  |  |
| Application Papers  |                          |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |                          |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  |                          |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                          |  |  |  |  |  |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.   |                          |  |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |                          |  |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |                          |  |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |                          |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |                          |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |                          |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |                          |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |                          |  |  |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |                          |  |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |                          |  |  |  |  |  |
| a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.   |                          |  |  |  |  |  |
| Attachment(s)   |                          |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)   | 5) Notice of Informal Pa | PTO-413) Paper No(s)<br>tent Application (PTO-152) |  |  |  |  |
| 6. Patent and Trademark Office  |                          |  |  |  |  |  |

Art Unit: 2871

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 24, the lead crossing "beneath" lacks antecedent basis, leaving it unclear if they are supposed between or beneath. For examination purposes, it is assumed to be an error and the "between" is assumed.

## Claim Rejections - 35 USC § 103

1. Claims 1, 2, 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon, U.S. Patent # 6,133, 967 in view of Kouchi et al, U.S. Patent # 5,886,365, Aoki et al, U.S. Patent # 6,177,916, and Sato et al, U.S. Patent # 6,081,305.

Moon discloses an LCD device with the claimed capacitor structure. Lacking from the disclosure is the indication of any peripheral driving circuit or any details, such as the use of the connector electrode (the capacitor side) in the peripheral areas. It was notoriously well known to include the drivers to reduce the cost of adding and connecting driving chips, and to use the same process and structure in the peripheral region to avoid the unnecessary design and manufacturing steps of not doing so, which

Art Unit: 2871

would therefore have been obvious for that reason\*\*. Further it was conventional to employ the connective electrodes in the driver circuits. These assertion of well known and conventional are evidenced by all there of the secondary references.

The connection of some parallel line to branched lines in matrix connections was conventional, as was the equal matrix components being the same size, and therefore would have been obvious for that reason. The claimed circuit elements were the conventionally employed, and obvious for that reason. The method clams merely state the step of making the device, which are therefore required to make the device, and therefore obvious over the device.

2. Claims 1, 2, 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagaki et al, U.S. Patent # 6,104,370, view of Kouchi et al, U.S. Patent # 5,886,365, Aoki et al, U.S. Patent # 6,177,916, and Sato et al, U.S. Patent # 6,081,305.

Nagaki et al discloses an LCD device with the claimed capacitor structure.

Lacking from the disclosure is the indication of any peripheral driving circuit or any details, such as the use of the connector electrode (the capacitor side) in the peripheral areas. It was notoriously well known to include the drivers to reduce the cost of adding and connecting driving chips, and to use the same process and structure in the peripheral region to avoid the unnecessary design and manufacturing steps of not doing so, which would therefore have been obvious for that reason\*\*. Further it was conventional to employ the connective electrodes in the driver circuits. These assertion of well known and conventional are evidenced by all there of the secondary references.

The connection of some parallel line to branched lines in matrix connections was conventional, as was the equal matrix components being the same size, and therefore would have been obvious for that reason. The claimed circuit elements were the

Art Unit: 2871

conventionally employed, and obvious for that reason. The method clams merely state the step of making the device, which are therefore required to make the device, and therefore obvious over the device.

Lacking from the disclosure is the indication of any peripheral driving circuit or any details. It was notoriously well known to include the drivers to reduce the cost of adding and connecting driving chips, and to use the same process and structure in the peripheral region to avoid the unnecessary design and manufacturing steps of not doing so, which would therefore have been obvious for that reason\*\*.

The connection of some parallel line to branched lines in matrix connections was conventional, as was the equal matrix components being the same size, and therefore would have been obvious for that reason. The claimed circuit elements were the conventionally employed, and obvious for that reason. The method clams merely state the step of making the device, which are therefore required to make the device, and therefore obvious over the device.

3. Claims 1, 2, 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujihara et al, U.S. Patent # 5,771,083, in view of Kouchi et al, U.S. Patent # 5,886,365, Aoki et al, U.S. Patent # 6,177,916, and Sato et al, U.S. Patent # 6,081,305.

Fujihara et al discloses an LCD device with the claimed capacitor structure. Lacking from the disclosure is the indication of any peripheral driving circuit or any details, such as the use of the connector electrode (the capacitor side) in the peripheral areas. It was notoriously well known to include the drivers to reduce the cost of adding and connecting driving chips, and to use the same process and structure in the peripheral region to avoid the unnecessary design and manufacturing steps of not doing so, which would therefore have been obvious for that reason\*\*. Further it was

Art Unit: 2871

conventional to employ the connective electrodes in the driver circuits. These assertion of well known and conventional are evidenced by all there of the secondary references.

The connection of some parallel line to branched lines in matrix connections was conventional, as was the equal matrix components being the same size, and therefore would have been obvious for that reason. The claimed circuit elements were the conventionally employed, and obvious for that reason. The method clams merely state the step of making the device, which are therefore required to make the device, and therefore obvious over the device.

4. Claims 6-7 and 9-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujihara et al, U.S. Patent # 5,771,083, in view of Kouchi et al, U.S. Patent # 5,886,365, Aoki et al, U.S. Patent # 6,177,916, and Sato et al, U.S. Patent # 6,081, 305 as applied above, and further in view of Mizuno et al, US Patent #6266110, Someya et al, US Patent #5,838,399 and Aoki et al, US Patent #5,425,857.

The secondary references all show the that the use of multiple electrodes for bus lines was notoriously well known for prevention of a voltage drop, and obvious for that reason.

All references show electrode with a high and low resistance, and where the electrodes have substantially the same shape as each other.

5. Claims 6-7 and 9-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagaki et al, U.S. Patent # 6,104,370, view of Kouchi et al, U.S. Patent # 5,886,365, Aoki et al, U.S. Patent # 6,177,916, and Sato et al, U.S. Patent # 6,081,305305 as applied above, and further in view of Mizuno et al, US

Art Unit: 2871

Patent #6266110, Someya et al, US Patent #5,838,399 and Aoki et al, US Patent #5,425,857.

The secondary references all show the that the use of multiple electrodes for bus lines was notoriously well known for prevention of a voltage drop, and obvious for that reason.

All references show electrode with a high and low resistance, and where the electrodes have substantially the same shape as each other.

6. Claims 6-7 and 9-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon, U.S. Patent # 6,133, 967 in view of Kouchi et al, U.S. Patent # 5,886,365, Aoki et al, U.S. Patent # 6,177,916, and Sato et al, U.S. Patent # 6,081,305305 as applied above, and further in view of Mizuno et al, US Patent #6266110, Someya et al, US Patent #5,838,399 and Aoki et al, US Patent #5,425,857.

The secondary references all show the that the use of multiple electrodes for bus lines was notoriously well known for prevention of a voltage drop, and obvious for that reason.

All references show electrode with a high and low resistance, and where the electrodes have substantially the same shape as each other.

7. Claims 6-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouchi et al, U.S. Patent # 5,886,365, Aoki et al, U.S. Patent # 6,177,916, or Sato et al, U.S. Patent # 6,081,305305 in view of Mizuno et al, US Patent #6266110, Someya et al, US Patent #5,838,399 and Aoki et al, US Patent #5,425,857.

Art Unit: 2871

The secondary references all show the that the use of multiple electrodes for bus lines was notoriously well known for prevention of a voltage drop, and obvious in any of the primary references for that reason.

All references show electrode with a high and low resistance, and where the electrodes have substantially the same shape as each other, also showing that these features were conventional. It is also noted that which electrode layer is called which layer can be arbitrarily construed (so long as there are sufficient layers, which each of the references does have), and that where in the circuit the electrodes are is not specified, so anywhere will do.

### Election/Restrictions

Applicant's election with traverse of group 1 in Paper No. 15 is acknowledged. It has been found that the claims 23-33 include details of the multilayer films, making the groups substantially similar and requiring the search in the multilayer subclass.

Therefore, the restriction has been dropped.

### Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### Conclusion

Art Unit: 2871

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 703-305-6202. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L. Sikes can be reached on 308-4842. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.

Kenneth A Parker Primary Examiner Art Unit 2871

September 9, 2002